

Applicant : Caroline Sarah Brown  
International Appl'n. No. : PCT/NL90/00130  
International Filing Date : 11 September 1990  
Page 2

been [equipped] provided with the genetic information that is necessary for expression of the B19 virus protein VP1.

2. (Amended) Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been provided with the genetic information which is necessary for expression of VP1 protein of the human parvovirus B19 according to claim 1.

3. (Amended) A method of producing VP1 protein of the human parvovirus B19 according to claim 1, by culturing Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been provided with the genetic information which is necessary for expression of the B19 virus protein VP1.

5. (Amended) Recombinant baculovirus expression vector, [equipped] provided with the genetic information which is necessary for expression of VP1 protein of the human parvovirus B19 according to claim 1 in Spodoptera frugiperda cells.

6. (Amended) [Recombinant] A recombinant baculovirus expression vector, according to claim 5, comprising recombinant baculovirus expression vector pAcB19VP1-YM1.

Applicant : Caroline Sarah Brown  
International Appl'n. No. : PCT/NL90/00130  
International Filing Date : 11 September 1990  
Page 3

7. (Amended) Recombinant baculovirus, [equipped] provided with the genetic information which is necessary for expression of VP1 protein of the human parvovirus B19 according to claim 1 in Spodoptera frugiperda cells.
8. (Amended) [Recombinant] A recombinant baculovirus according to claim 7, comprising a recombinant baculovirus AcB19VP1L.
9. (Amended) The use of recombinant non-fused VP1 protein of the human parvovirus B19 according to claim 1, formed in Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic information that is necessary for expression of the B19 virus protein VP1, in an assay for detecting antibodies directed against the B19 virus protein VP1 in a sample to be tested.
10. (Amended) The use of Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic information that is necessary for expression of VP1 protein of the human parvovirus B19, according to claim 1, in an assay for detecting antibodies directed against the B19 virus protein VP1 in a sample to be tested.
11. (Amended) The use of Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been

2  
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[equipped] provided with the genetic information that is necessary for expression of VP1 protein of the human parvovirus B19, according to claim 1, in an IFA or ELISA for detecting antibodies directed against the B19 virus protein VP1 in a sample to be tested.

12. (Amended) A vaccine preparation for inducing an immune response which provides protection against the human parvovirus B19, comprising recombinant non-fused VP1 protein of the human parvovirus B19 according to claim 1, formed in Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic information that is necessary for the expression of the B19 virus protein VP1, or an antigenically active portion of this recombinant B19 virus protein VP1, in combination with one or more carriers and/or adjuvants suitable for vaccination purposes.

13. (Amended) The use of recombinant non-fused VP1 protein of the human parvovirus B19 according to claim 1, formed in Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic information that is necessary for expression of the B19 virus VP1, or with an antigenically active portion of this recombinant B19 virus protein VP1 for inducing an immune response, which provides protection against the human parvovirus B19.

Applicant : Caroline Sarah Brown  
International Appl'n. No. : PCT/NL90/00130  
International Filing Date : 11 September 1990  
Page 5

14. (Amended) Recombinant non-fused VP2 protein of the human parvovirus B19, formed in Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic information that is necessary for expression of the B19 virus protein VP2.
15. (Amended) Recombinant virus-like particles consisting of VP2 protein of the human parvovirus B19, according to claim 14, formed in Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic information that is necessary for the expression of the B19 virus protein VP2.
16. (Amended) Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic information that is necessary for expression of VP2 protein of the human parvovirus B19 according to claim 14.
17. (Amended) A method of producing VP2 protein of the human parvovirus B19, according to claim 14, and/or virus-like particles consisting of VP2 protein of the human parvovirus B19, by culturing Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic information that is necessary for expression of the B19 virus protein VP2.

19. (Amended) [Recombinant] A recombinant baculovirus expression vector, according to claim 14, comprising recombinant baculovirus expression vector, [equipped] provided with the genetic information that is necessary for expression of VP2 protein of the human parvovirus B19 in Spodoptera frugiperda cells.
20. (Amended) [Recombinant] A recombinant baculovirus expression vector, according to claim 14, comprising recombinant baculovirus expression vector pAcB19VP2-YM1.
21. (Amended) Recombinant baculovirus, [equipped] provided with the genetic information that is necessary for expression of VP2 protein of the human parvovirus B19 according to claim 14, in Spodoptera frugiperda cells.
22. (Amended) [Recombinant] A recombinant baculovirus according to claim 21, comprising recombinant baculovirus AcB19VP2L.
23. (Amended) The use of recombinant non-fused VP2 protein of the human parvovirus B19 according to claim 14, and/or of virus-like particles consisting of VP2 protein of the human parvovirus B19, formed in Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic information that is necessary for expression of the B19 virus protein VP2, in an assay for detecting antibodies directed against the

B19 virus protein VP2 in a sample to be tested.

24. (Amended) The use of Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic information which is necessary for expression of VP2 protein of the human parvovirus B19 according to claim 14, in an assay for detecting antibodies directed against the B19 virus protein VP2 in a sample to be tested.
25. (Amended) The use of Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic information that is necessary for expression of VP2 protein of the human parvovirus B19 according to claim 14, in an IFA or ELISA for detecting antibodies directed against the B19 virus protein VP2 in a sample to be tested.
26. (Amended) A vaccine preparation for inducing an immune response which provides protection against the human parvovirus B19, comprising recombinant non-fused VP2 protein of the human parvovirus B19 according to claim 14, and/or virus-like particles consisting of VP2 protein of the human parvovirus B19, formed in Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic information that is necessary for expression of the B19

Applicant : Caroline Sarah Brown  
International Appl'n. No. : PCT/NL90/00130  
International Filing Date : 11 September 1990  
Page 8

virus protein VP2, or an antigenically active portion of this recombinant B19 virus protein VP2, in combination with one or more carriers and/or adjuvants suitable for vaccination purposes.

27. (Amended) The use of recombinant non-fused VP2 protein of the human parvovirus B19 according to claim 14, and/or of virus-like particles consisting of VP2 protein of the human parvovirus B19, formed in Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic information that is necessary for expression of the B19 virus protein VP2, or with an antigenically active portion of this recombinant B19 virus protein VP2, for inducing an immune response which provides protection against the human parvovirus B19.
28. (Amended) Recombinant virus-like particles consisting of VP1 and VP2 protein of the human parvovirus B19, formed in Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic information that is necessary for expression of these B19 virus proteins.
29. (Amended) Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic information that is necessary for expression of VP1 and VP2 protein of the human parvovirus

B19 according to claim 28.

30. (Amended) A method of producing VP1 and VP2 protein of the human parvovirus B19 according to claim 28, and/or virus-like particles consisting of VP1 and VP2 protein of the human parvovirus B19, by culturing Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic information that is necessary for expression of these B19 virus proteins.

32. (Amended) Recombinant baculovirus expression vector, [equipped] provided with the genetic information which is necessary for expression of VP1 and VP2 protein of the human parvovirus B19 according to claim 28, in Spodoptera frugiperda cells.

33. (Amended) Recombinant baculovirus, [equipped] provided with the genetic information that is necessary for expression of VP1 and VP2 protein of the human parvovirus B19 according to claim 28, in Spodoptera frugiperda cells.

34. (Amended) The use of recombinant virus-like particles consisting of VP1 and VP2 protein of the human parvovirus B19, according to claim 28, formed in Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic



Applicant : Caroline Sarah Brown  
International Appl'n. No. : PCT/NL90/00130  
International Filing Date : 11 September 1990  
Page 10

information that is necessary for the expression of these B19 virus proteins, in an assay for detecting antibodies directed against the B19 virus in a sample to be tested.

35. (Amended) The use of Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic information which is necessary for expression of VP1 and VP2 protein of the human parvovirus B19, according to claim 28, in an assay for detecting antibodies directed against the B19 virus in a sample to be tested.

36. (Amended) The use of Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic information which is necessary for expression of VP1 and VP2 protein of the human parvovirus B19, according to claim 28, in an IFA or ELISA for detecting antibodies directed against the B19 virus in a sample to be tested.

37. (Amended) A vaccine preparation for inducing an immune response which provides protection against the human parvovirus B19, comprising recombinant virus-like particles consisting of VP1 and VP2 protein of the human parvovirus B19, according to claim 28, formed in Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic

Applicant : Caroline Sarah Brown  
International Appl'n. No. : PCT/NL90/00130  
International Filing Date : 11 September 1990  
Page 11

information that is necessary for expression of these B19 virus proteins, in combination with one or more carriers and/or adjuvants suitable for vaccination purposes.

38. (Amended) The use of recombinant virus-like particles consisting of VP1 and VP2 protein of the human parvovirus B19, according to claim 28, formed in Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic information that is necessary for expression of these B19 virus proteins, for inducing an immune response which provides protection against the human parvovirus B19.
39. (Amended) Recombinant virus-like particles, comprising VP2 protein of the human parvovirus B19, one or more epitopes of proteins of other pathogens having been incorporated into said VP2 protein, said particles having been formed in Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic information that is necessary for expression of the modified VP2 protein.
40. (Amended) Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic information that is necessary for expression of VP2 protein of the human parvovirus B19, one or more epitopes of proteins of other pathogens having been

incorporated into said VP2 proteins according to claim 39.

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41. (Amended) A method of producing virus-like particles, comprising VP2 protein of the human parvovirus B19, one or more epitopes of proteins of other pathogens having been incorporated into said VP2 protein, according to claim 39, by culturing Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic information which is necessary for expression of the modified VP2 protein.

43. (Amended) Recombinant baculovirus expression vector, [equipped] provided with the genetic information that is necessary for expression in Spodoptera frugiperda cells of VP2 protein of the human parvovirus B19, one or more epitopes of proteins of other pathogens having been incorporated into said VP2 protein according to claim 39.

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44. (Amended) Recombinant baculovirus, [equipped] provided with the genetic information that is necessary for expression in Spodoptera frugiperda cells of VP2 protein of the human parvovirus B19, one or more epitopes of proteins of other pathogens having been incorporated into said VP2 protein.

45. (Amended) The use of virus-like particles, comprising VP2 protein of the human parvovirus B19, one or more epitopes of proteins of other pathogens having been incorporated

into said VP2 protein, according to claim 39, said particles having been formed in Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic information that is necessary for expression of the modified VP2 protein, in an assay for detecting antibodies directed against the incorporated epitopes in a sample to be tested.

46. (Amended) The use of Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic information that is necessary for expression of VP2 protein of the human parvovirus B19, into which VP2 protein one or more epitopes of proteins of other pathogens have been incorporated, according to claim 39, in an assay for detecting antibodies directed against the incorporated epitopes in a sample to be tested.

47. (Amended) A vaccine preparation, comprising virus-like particles, comprising VP2 protein of the human parvovirus B19, into which VP2 protein one or more epitopes of proteins of other pathogens have been incorporated, according to claim 39, which particles have been formed in Spodoptera frugiperda cells which by means of a baculovirus expression vector system have been [equipped] provided with the genetic information necessary for expression of the modified VP2 protein, in combination with one or more